

AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION:

Please replace the paragraph beginning at page 9, line 20 with the following new paragraph:

~~The~~ A feature of the present invention has an objective is to offer a pen input/display device capable of wirelessly transmitting information on sensed pen pressure to a device main body in ultrasonic pen input operation, in order to realize multifunctional, high performance pen input based on the pen pressure information in a simple manner.

Please replace the paragraph beginning at page 10, line 1 with the following new paragraph:

~~To achieve the objective~~ In accordance with an aspect of the invention, a pen input/display device ~~in accordance with~~ the present invention, comprising comprises:

Please replace the paragraph beginning at page 10, line 25 with the following new paragraph:

According to an embodiment of the invention, the pen pressure information infrared transmit control section controls the infrared transmission section to transmit the infrared signal which changes in accordance with the pen

pressure sensed by the pen pressure sensor section when the pen tip is in contact.

Please replace the paragraph beginning at page 11, line 20 with the following new paragraph:

Additional ~~objects,~~ advantages and novel features of the invention will be set forth in part in the description which follows, and in part will become apparent to those skilled in the art upon examination of the following or may be learned by practice of the invention.

Please replace the paragraph beginning at page 16, line 16 with the following new paragraph:

Still referring to Figure 2, the display panel 10 and the input pen 30 ~~have the same arrangement as~~ may be generally similar to the display panel 100 and the input pen 120 in Figure 18(a) and Figure 18(b) illustrating conventional art but include various differences discussed hereinafter.

Please replace the paragraph beginning at page 20, line 9 with the following new paragraph:

[[I]] In the present embodiment, the conversion of the distance values A, B to the coordinates (X, Y) on the

display panel 10 by the coordinates display processing section 46 involves pen pressure information.

Please replace the paragraph beginning at page 33, line 21 with the following new paragraph:

The present embodiment ~~achieves the objective to transmit~~ transmits various pen pressure information by altering the interval between the two infrared signal pulses. Therefore, at least two infrared signal pulses are necessary and sufficient. For example, the first infrared signal pulse A is used as a trigger indicating the beginning of an ultrasonic signal, whereas the interval between two succeeding infrared signal pulses represent pen pressure information. In this case, three infrared signal pulses are transmitted in all. In other words, the number of infrared signal pulses is not limited to two.

Please replace the paragraph beginning at page 41, line 25 with the following new paragraph:

As in the foregoing, the pen input/display device in accordance with embodiments of the present invention is the aforementioned pen input/display device, wherein the pen pressure information infrared transmission control means alters the pulse width of an infrared signal pulse in

accordance with pen pressure information for transmission from the infrared transmission means.

Please replace the paragraph beginning at page 42, line 11 with the following new paragraph:

The pen input/display device in accordance with an embodiment of the present invention is the aforementioned pen input/display device, wherein the input pen is provided with sequence input means enabling inputs of a sequence of frequency of use of individual pen pressure levels. Meanwhile, the pen pressure information infrared transmission control means controls the infrared transmission means to transmit an infrared signal the pulse widths of which grow longer in descending sequence of frequency of use of individual pen pressure levels as sorted through the sequence input means.

Please replace the paragraph beginning at page 42, line 22 with the following new paragraph:

According to an embodiment of the invention, the infrared signal is transmitted with pulse widths which grow longer in descending sequence of frequency of use of individual pen pressure levels. This enables simple and high

performance pen input operation at low power, while maintaining high display quality.

Please replace the paragraph beginning at page 43, line 3 with the following new paragraph:

The pen input/display device in accordance with an embodiment of the present invention is the aforementioned pen input/display device, wherein under the control of the pen pressure information infrared transmission control means, the infrared transmission means transmits at least two infrared signal pulses at an interval which alters in accordance with pen pressure information.

Please replace the paragraph beginning at page 43, line 18 with the following new paragraph:

~~The~~ Various embodiments of the present invention ~~achieves the objective to~~ transmit various pen pressure information by altering the interval between the two infrared signal pulses. Therefore, at least two infrared signal pulses are necessary and sufficient. For example, the first infrared signal is used as a trigger indicating the beginning of an ultrasonic signal, whereas the interval between two succeeding infrared signal pulses represent pen pressure information. In this case, three infrared signal

pulses are transmitted in all. In other words, the number of infrared signal pulses is not limited to two.

Please replace the paragraph beginning at page 44, line 4 with the following new paragraph:

The pen input/display device in accordance with embodiments of the present invention is the aforementioned pen input/display device, wherein the pen pressure information infrared transmission control means outputs multiple infrared signal pulses in accordance with pen pressure information.

Please replace the paragraph beginning at page 44, line 13 with the following new paragraph:

The pen input/display device in accordance with embodiments of the present invention is the aforementioned pen input/display device, wherein the infrared signal is composed of pulses representing bit data.

Please replace the paragraph beginning at page 43, line 17 with the following new paragraph:

According to an embodiment of the invention, the infrared signal is a signal representing bit data. For example, 8 levels of grayscale (pen pressure information)

can be transmitted using 3 bits. That is, 8 levels of grayscale (pen pressure information) can be transmitted in as short as a 3-bit transmission time.

Please replace the paragraph beginning at page 45, line 1 with the following new paragraph:

The pen input/display device in accordance with an embodiment of the present invention is the aforementioned pen input/display device, wherein the input pen includes sequence input means for allowing for inputs of a series of pen pressure levels as sorted by frequency of use, and the pen pressure information infrared transmission control means controls the infrared transmission means to transmit the infrared signal the infrared signal output periods of which grow longer in descending sequence of frequency of use of individual pen pressure levels as sorted through the sequence input means.

Please replace the paragraph beginning at page 45, line 12 with the following new paragraph:

According to an embodiment of the invention, the infrared signal is transmitted over an infrared signal output period which grow longer in descending sequence of frequency of use of individual pen pressure levels as sorted

through the sequence input means. This enables simple and high performance pen input operation at low power, while maintaining high display quality.